

CONCORDIA UNIVERSITY

Council of the Faculty of Engineering and Computer Science

Minutes of Meeting 03-03

held

Friday, April 25, 2003, 2:00 p.m., H-769

Present:	N. Esmail (Chair)	L. Harris	L. Quesnel
	R.B. Bhat	J.E. Jans	A.S. Ramamurthy
	T.D. Bui	F. Khendek	P. Regimbald
	M.Y. Chen	W.E. Lynch	N. Shiri-Varnaamkhaasti
	C. Dickie-Clark	O. Moselhi	C.W. Trueman
	M. Di Pietrantonio	J. Opatrny	G.H. Vatistas
	R. Dssouli	C. Paradisis	R.G. Zmeureanu
	T. Fancott	O.A. Pekau	S. de Souza
	A.M. Hanna	M.D. Pugh	(Recording Secretary)

Observers:	N. Benjamin	S. Ghaderpanah	L. Zack
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Regrets:	M.O. Ahmad	R. Ganesan	K. Khorasani
	J. Daigle		

Guest:	M.R. Soleymani
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1. Adoption of Agenda

Motion **That the agenda be adopted (O. Moselhi, R.B. Bhat)**
03-03-01

Vote: Carried unanimously

2. Adoption of Minutes

The following correction was identified, namely the removal of 'the'

- Page 5, last paragraph: The Chair responded that every slot course must be forwarded to Faculty Council for information purposes failing which the system could be affected.

Motion **That the Minutes of Meeting 03-02 (March 21, 2003) be adopted, as**
03-03-02 **corrected (M.D. Pugh, R. Dssouli)**

Vote: Carried unanimously

3.

Chair's Remarks

Research

The Chair said that being the month of April and with our research involvements, we can now concentrate on our commitments to industry.

Convocation

The Chair announced that the next Convocation will be held on June 12, 2003 in the morning at Place des Arts. He urged the new faculty members to attend in large numbers. While the students appreciate their presence on the stage, it also demonstrates our interest in our students who deserve our consideration.

New Building

The construction targets are, this far, on schedule. The schedule for moving to the new building is as follows:

- System Analysts will move to the 7th floor during Fall 2004
- The Faculty Administration and Departments will move in December 2004
- All other offices will move between the period January-May 2005

The members were informed that Dr. Giguère has been retained by the Faculty. He will provide assistance dealing with management questions on the construction of the new building. As such, he will be making a presentation at the next Faculty Council meeting as well as at department meetings, and will provide a general overview on the move to the new building.

The Chair remarked that it has been decided to hold an international conference to coincide with the opening of the new building. The Conference will be in the area of information systems because of its applications in all areas. A unifying theme was vital to promote full participation. Preparations for this conference have begun. The Chair added that we are looking for a venue. We hope to hold the conference in the last week of June 2005.

Accreditation – Final Stage

The Chair informed the members that the preliminary report, following the Accreditation visit, was received in mid-March. Our answer was provided a few weeks ago, to which the Chair of the Accreditation Visiting Team has responded. The next stage is a meeting with CEAB in Ottawa which has been scheduled for June 2, 2003 at which time a final decision will be rendered.

Academic News

The Chair informed the members of the change in the Government of Quebec's approach to financing academic programs. For undergraduate engineering programs, we will receive 2.33 units in lieu of the former 1.77 units. However, undergraduate programs in computer science will suffer a drop from 1.77 units to 1.21 units. The second cycle engineering programs, too, will suffer a drop from 5.05 units to 4.16 units, whereas the second cycle computer science programs will fall from 5.05 to 2.65 units. With respect to the Ph.D. program in engineering, there is a

jump in financing from 7.24 units to 7.77 units, but its counterpart in computer science suffers a drop from 7.24 to 5.65 units. Therefore, the Chair continued that based on this year's student enrolment figures, a preliminary overview of the Faculty's budget indicates a total drop of \$1.5-\$2 million, that is, a 7% drop. These figures will provide a guiding principle for the Faculty over the next 10-15 years. The Chair advised that we have to adapt ourselves and our programs to this new reality.

The Chair said that the economy of education is dictated by our society and the government which influence certain academic behaviour. The Chair suggested that with the devaluation of the second cycle and the drop in funding, we need, for example, to concentrate our efforts in programs such as a Diploma in Software Engineering rather than a Diploma in Computer Science. We can still have cost effective M.Eng. programs because they do not require as much effort from a faculty member as the Masters research program. The M.Eng, Diploma and M.A.Sc. programs are a large portion of our revenue. We have about 710 FTEs in this area. In the old calculation, this would be equivalent to 1900 undergraduate FTEs. The Chair continued that it is more cost effective to have Ph.D. than M.A.Sc. students. Ph.D. funding has jumped from 7.24 to 7.77 units whereas M.A.Sc. funding has dropped from 5.05 to 4.16 units. This funding formula will influence our future behaviour and we must be able to maximize our returns on our efforts. The more money we have, the more quality we can invest in our programs.

The Chair informed the members that an Executive Academic Planning Session was held to discuss the major parameters of academic planning. The critical point, which affects every faculty member, is that this year we have to give 710 classroom course assignments. The existing complement of 132 full-time faculty members has a teaching capacity of 432 assignments. This is 61% of the 710 classroom course assignments. If we give 100% of the classroom course assignments, we will need 222 faculty members, assuming that we will get the same 4000 FTEs as last year, the number of students per full-time faculty members will be less than 20, which is the breaking point of quality. With a strength of 170 faculty members, our teaching capacity will rise from 432 to 552 which is still short of the 710 classroom course assignments. The Chair felt that 710 is a high number of teaching obligations.

According to the Chair, the suspect areas are:

- a) Concordia prides itself on small classes. The Chair said that we need to break the barrier of small classes because the price goes up for smaller classes and requires more part-time teaching. While small classes provide quality teaching, part-time teaching is not quality teaching, the Chair indicated.
- b) Another issue is the number of electives and graduate courses that we offer. While it is an excellent idea to offer graduate courses in every research area, the price is a high number of teaching assignments and a large number of faculty members. There is much demand on the number of teaching assignments. Therefore, we need to decrease the 432 teaching course assignments further. If we take the 710 classroom course assignments, the global classroom size is 40.

But with a class size increase from 40 to 43, we can reduce our commitment by 70 classroom course assignments. The Chair advised that we should not be squeamish about large classrooms. He suggested reexamining the number of electives and graduate course offerings, and concentrate on more general graduate courses and more popular electives.

Quality of Teaching Assistants

The Chair said that the Accreditation Visiting Team has been very critical of the quality of our TAs. There were complaints about the TAs' communication skills. The Chair added that we have to take measures to address this problem. The issue has to be debated.

Grades

Another issue that needs examination is the uniformity of grading. A recent study by Student Affairs on multi-section courses indicated wide discrepancies in grading. For example in 1 section, the failure rate was 28% whereas in all the other sections of the same course the failure rate was 3%. The Chair remarked that this kind of discrepancy highlights a lack of coordination. Also, the value of the grade needs discussion.

Enrolment

The Chair indicated that for the next Fall semester, there is a sharp enrolment increase by 30%-100% in the programs of Building Engineering, Civil Engineering, Mechanical Engineering and Industrial Engineering, but a drop in Computer Engineering and Computer Science programs. In Software Engineering and Electrical Engineering programs, there is a slight jump in enrolment.

He added that at the present time, we are considering applications and acceptances. In 2001, there were 3393 first choice applications, in 2002, 2904 and today, we have 2354 first choice applications. In general, we are expecting a drop of about 200 applications relative to last year's figures.

The Chair added that this is the first year that we are handling admissions. Everything is running well in coordination with the Registrar's Office. The picture of the admissions handling process is bright.

Finally, the Chair noted that there was another study done by Student Affairs. A survey of our undergraduate and graduate students was conducted in 2002. The Chair remarked that the Executive Summary is being mailed today. There is interesting data on the students. Most of our students are regular and cohort students; a very small proportion is part-time. Full-time enrolment is going up. Mature student enrolment is low. Most of our students express satisfaction with the programs.

The floor was open to questions. A member pointed out that on the issue of large classrooms, faculty members are limited by the number of large classrooms available in the University. The Chair agreed that it is a factor, which needs consideration.

4. **Undergraduate Curriculum Changes (ECFC Doc. 2003-03-01A)**

Dr. Fancott presented for approval the following changes that had been earlier approved by APC.

Motion **That the changes under the code of Co-Operative Education Format and**
03-03-03 **Work Term Courses (pages 1-10) be approved (T. Fancott, M.D. Pugh)**

It was explained that the changes involved co-op regulations and the introduction of 4 work term courses each in the B.Eng. and B.Comp.Sc. programs.

Vote: Carried unanimously

Motion **That the program and course changes for the Department of Electrical and**
03-03-04 **Computer Engineering (pages 11-40) be approved (T. Fancott, W.E. Lynch)**

Dr. Lynch walked the members through the changes course by course. In summary, the changes concerned course descriptions, title changes, credit changes, addition of lab components/tutorials, prerequisite changes, addition of new courses and course deletion.

Vote: Carried unanimously

Motion **That the program and course changes for the Department of Mechanical and**
03-03-05 **Industrial Engineering (pages 41-60) be approved (T. Fancott, M.D. Pugh)**

Dr. Pugh walked the members through the changes course by course. In summary, the changes concerned course numbers, course descriptions, course deletions and change/addition of tutorials.

Vote: Carried unanimously

Motion **That the course change for the Department of Building, Civil and**
03-03-06 **Environmental Engineering (pages 61-62) be approved**
 (T. Fancott, O. Moselhi)

Dr. Moselhi presented the change in course number and course description, namely BLDG 482-Impact of Technology on Society and Architecture. He explained that this change was effected to meet CEAB requirements.

Vote: Carried unanimously

Motion **That the changes in the Engineering Core (pages 63-68) be approved**
03-03-07 **(T. Fancott, W.E. Lynch)**

This involved a change in course number/prerequisite in ELEC 275-Principles of Electrical Engineering.

Vote: Carried unanimously

Motion 03-03-08 **That the document ECFC Doc. 2003-03-01B, Three-Year Technical DEC-Exemptions and Advanced Standing be approved (T. Fancott, R.B. Bhat)**

It was explained that the objective of the project was to provide CEGEP technology graduates with an easy integration into the Faculty of Engineering and Computer Science. The major programs were reviewed and standard exemptions and advanced standing based on these programs were determined.

A change in course number was notified in the document on page 5, namely ELEC 275.

Following a discussion, it was suggested that the motion be tabled and sent to the Departments for review. The recommendation that the motion be tabled was made by Dr. Vatistas.

5. Graduate Curriculum Changes (ECFC Doc. 2003-03-02)

Dr. Vatistas presented the following graduate curriculum changes:

Department of Mechanical and Industrial Engineering

The course, ENGR 6371-Micromechatronic Systems and Applications, has been deleted.

A new course is being introduced, namely, MECH 6371-Design and Fabrication of Microsystems and Devices.

Motion 03-03-09 **That ENGR 6371 be deleted and that the introduction of MECH 6371, be approved (G.H. Vatistas, R.B. Bhat)**

Vote: Carried unanimously

CIISE

Dr. Dssouli presented the following three new courses:

INSE 7100 – Design and Analysis of Security Protocols

INSE 7110 – Value Added Service Engineering in Next Generation Networks

INSE 7120 – Advanced Network Management

It was explained that the courses being introduced in the area of Information Systems Engineering constitute a basis for Studies in Service Engineering and Advanced Network Management.

Motion 03-03-10 **That the Courses INSE 7100, INSE 7110 and INSE 7120 be approved (G.H. Vatistas, R. Dssouli)**

Vote: Carried unanimously

Dr. Lynch presented the rationale for the introduction of the new course, ELEC 6261-Optical Devices for High-speed Communications.

That the introduction of ELEC 6261 be approved
(G.H. Vatisstas, W.E. Lynch)

Vote: Carried unanimously

Dr. Vastistas presented the editorial changes and changes concerning regulations/requirements for the following:

- ENGR 6991 – Project and Report III
- Proposed Text for Thesis
- Proposed Text for Master of/Magisteriate in Engineering
- ENGR 6501 – Applied Elasticity
- CIVI 6501 – Foundation Engineering
- A new course, BCEE 6961 – Graduate Seminar in Building and Civil Engineering was proposed for approval.

That the above changes be approved
(G.H. Vatistas, O. Moselhi)

Vote: Carried unanimously

The Chair announced the winners of the Staff Excellence Award. Guy Gosselin was the recipient in the Technical Staff category and Marcelle Trotman in the Support Staff category.

The Chair also notified the members that some of our courses are classified under non-engineering categories. To ensure that we receive the appropriate funding from the Ministry of Education, a change in some of our course titles may be required.

6. Election of Faculty representative on the Board of Governors

Dr. R.B. Bhat (MIE) 2003-2006

7. Election of Faculty representative on the Undergraduate Studies Committee - Chair

Dr. W.E. Lynch (ECE) 2003-2005

8. Election of Faculty representative on Senate

Dr. C.W. Trueman (ECE) 2003-2006

9. Election of Faculty representative on the Academic Hearing Board

Dr. C. Wang (ECE) 2003-2005

10. **Election of Faculty representative on the Appeals Committee**

Dr. A.J. Al-Khalili (ECE)

2003-2005

11. **Election of Faculty representative on the University Library Committee**

Dr. C. Wang (ECE)

2003-2006

12. **Election of Faculty representative on the Distinguished Professor Emeritus Committee**

Dr. A. Sebak (ECE)

2003-2004

Motion **That the elected representatives under the corresponding Committees**
03-03-13 **(items 6-12), be approved (A.S. Ramamurthy, T. Fancott)**

Vote: Carried unanimously

13. **Other Business**

Mr. Regimbald requested the members to ensure that the grades were submitted on time, particularly in the case of potential graduates.

14. **Adjournment**

The meeting was adjourned at 3:45 p.m. (T. Fancott)

/sd